

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A light emitting device causing emission output of a light having a pseudo-continuous spectrum which is modeled upon is a continuous spectrum obtained from a heat-radiation light source obtained by synthesizing a plurality of emissions differing in peak wavelength so as to ensure an effective wavelength region showing an emission intensity of 5% or more of a reference intensity over a wavelength region of 50 nm or more, the reference intensity being defined as an emission intensity at a peak wavelength in the synthesized spectrum,

having a double hetero light emitting layer portion composed of compound semiconductors, the double hetero light emitting layer portion having an active layer comprising a plurality of emission unit layers differing from each other in band gap energy, and the emission output of the light having a pseudo-continuous spectrum is ascribable to a combination of light emission from the individual emission unit layers,

wherein the emission unit layers comprise well layers each of which is sandwiched by two barrier layers, and

wherein ~~the~~ well-depth of ~~the~~ well layers in the emission unit layer ~~is getting smaller with being shorter the emission wavelength is a shallower depth in a well having a shorter emission wavelength.~~

2 – 6. (canceled)

7. (previously presented) The light emitting device as claimed in Claim 1, wherein emission intensity of the emission unit layer is adjusted based on thickness and/or the number of the well layers.

8. (canceled)

9. (original) The light emitting device as claimed in Claim 7, wherein the well layers, which contribute to a wavelength region where a larger emission intensity is attained in the pseudo-continuous spectrum, are disposed in a larger thickness and/or the number of layers.

10 - 12. (canceled)

13. (previously presented) The light emitting device as claimed in Claim 1, wherein the well emission unit layer has a quantum well structure.

14. (canceled)

15. (original) The light emitting device as claimed in Claim 13, wherein the emission

intensity of the emission unit layer having the quantum well structure is adjusted by the number of layers of the well layers.

16. (canceled)

17. (original) The light emitting device as claimed in Claim 13, wherein the well layers have a smaller thickness in the emission unit layer causative of a shorter emission wavelength.

18 - 20. (canceled)

21. (previously presented) The light emitting device as claimed in Claim 1, wherein a plurality of repetitive units consisting of a set of emission unit layers having different emission wavelengths are periodically formed in the thickness-wise direction of the active layer.

22. (canceled)

23. (original) The light emitting device as claimed in Claim 21, wherein the double hetero light emitting layer portion is designed so that the main surface thereof on one side of the stacking direction serves as a light extraction surface, and so that the emission unit layer causative of a longer emission wavelength in each of the repetitive

unit is disposed more further from the light extraction surface in the thickness-wise direction of the active layer.

24. (canceled)

25. (previously presented) The light emitting device as claimed in Claim 1, wherein the plurality of emission unit layers are aligned according to an order of magnitude of the band gap energy such as ensuring a difference of 0.2 eV or less between every adjacent band gap energies..

26. (canceled)

27. (original) The light emitting device as claimed in Claim 25, wherein the effective wavelength region of the pseudo-continuous spectrum is synthesized by four or more emission unit layers differing in emission wavelength from each other.

28. (canceled)

29. (original) The light emitting device as claimed in Claim 27, wherein the pseudo-continuous spectrum has a ripple ratio of 0.1 or less over the entire portion of the effective wavelength region.

30 - 32. (canceled)

33. (previously presented) The light emitting device as claimed in Claim 1, wherein the double hetero light emitting layer portion is composed of $(\text{Al}_x\text{Ga}_{1-x})_y\text{In}_{1-y}\text{P}$ (where, $0 \leq x \leq 1$ and $0 \leq y \leq 1$), and the effective wavelength region is ensured within a wavelength region from 550 nm to 670 nm, both ends inclusive.

34 - 38. (canceled)

39. (previously presented) The light emitting device as claimed in Claim 1 having a first device and a second device as combined therein, both devices respectively having a double hetero light emitting layer portion composed of compound semiconductors, the first device having an emission wavelength of an emission unit layer contained in an active layer in the double hetero light emitting layer portion of 520 nm to 700 nm, both ends inclusive, and the second device of which having the same of 350 nm to 560 nm, both ends inclusive, and at least either of the first device and second device includes a plurality of the emission unit layers in the active layer.

40. (canceled)

41. (original) The light emitting device as claimed in Claim 39, wherein the double hetero light emitting layer of the first device is composed of $(\text{Al}_x\text{Ga}_{1-x})_y\text{In}_{1-y}\text{P}$ (where,

$0 \leq x \leq 1$ and $0 \leq y \leq 1$), and the double hetero light emitting layer of the second device is composed of $\text{In}_a\text{Ga}_b\text{Al}_{1-a-b}\text{N}$ (where, $0 \leq a \leq 1$, $0 \leq b \leq 1$ and $a+b \leq 1$).

42 - 44. (canceled)

45. (previously presented) The light emitting device as claimed in Claim 1, wherein the pseudo-continuous spectrum contains no ultraviolet emission components having a wavelength of 350 nm or shorter.

46 - 53. (canceled)

54. (previously presented) The light emitting device as claimed in Claim 21, wherein the double hetero light emitting layer portion is designed so that the main surface thereof on one side of the stacking direction serves as a light extraction surface, and so that the emission unit layer in the repetitive unit causative of longer emission wavelength is disposed more further from the light extraction surface in the thickness-wise direction of the active layer.